Additional Information

Capacitance-voltage characteristics of thin-film transistors fabricated with solution-processed semiconducting carbon nanotube networks

Le Cai¹, Suoming Zhang¹, Jinshui Miao¹, Qinqin Wei¹, Chuan Wang^{1*}

E-mail: cwang@msu.edu

¹ Department of Electrical and Computer Engineering, Michigan State University, East Lansing, Michigan 48824, USA

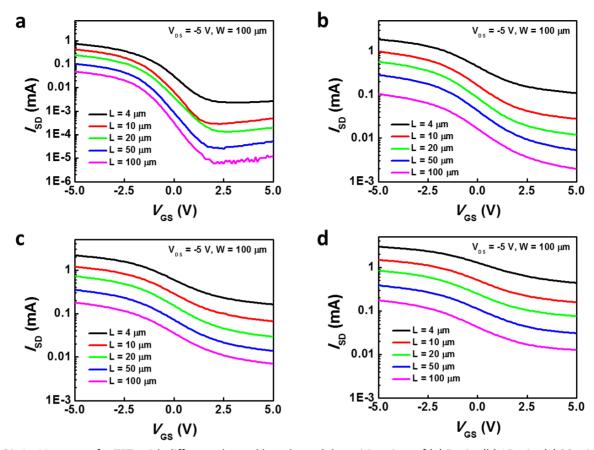


Figure S1. I_{SD} - V_{GS} curves for TFTs with different channel lengths and deposition time of (a) 5 min; (b) 15 min; (c) 30 min, and (d) 90 min.

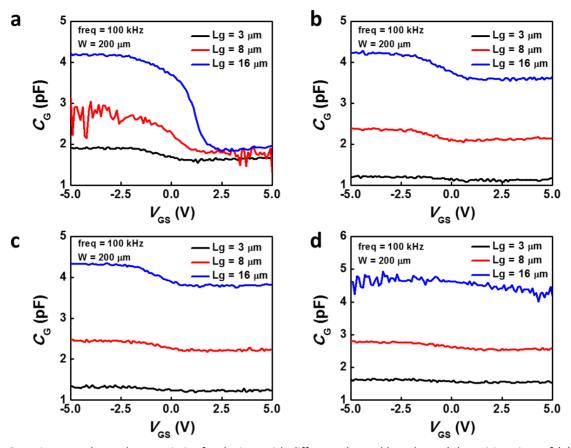


Figure S2. Capacitance-voltage characteristics for devices with different channel lengths and deposition time of (a) 5 min, (b) 15 min, (c) 30 min, and (d) 90 min, measured at a frequency of 100 kHz.

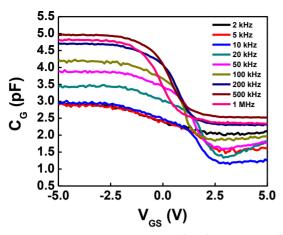


Figure S3. Capacitance-voltage (C-V) curves at different frequencies (2 kHz – 1 MHz) of the TFT with a deposition time of 5 min.

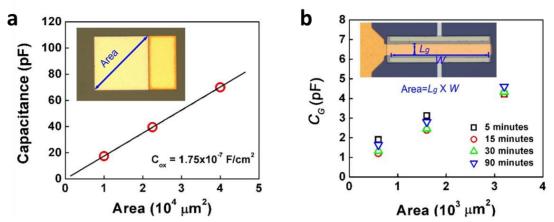


Figure S4. Measured capacitance *vs.* effective area for parallel capacitors (a) and carbon nanotube TFTs with underlapped gate electrodes (b). The insets show the optical micrograph of a parallel capacitor and an underlap gate TFT, where the effective capacitance areas are indicated.